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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/543,052	04/05/2000	Gopal Parupudi	MS1-508US	7216
22801	7590	11/18/2004	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			GARY, ERIKA A	
			ART UNIT	PAPER NUMBER
			2681	

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/543,052

Applicant(s)

PARUPUDI ET AL.

Examiner

Erika A. Gary

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date multiple IDS's.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 41 recites the limitation "the hand-held mobile computing device" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 17-19, 29, 34, and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by applicant's submission of prior art, Merriam, US Patent Number 6,401,051 (hereinafter Merriam).

Regarding claims 17, 34, and 41, Merriam discloses a method, apparatus, and computer readable medium for providing determining the location of a computing device comprising: providing multiple location providers that are configured to provide location information that pertains to a current location of the computing device; receiving location

information from the multiple location providers using a common interface; and using the information that is received from the multiple location providers to ascertain a current device location [fig. 2a; col. 3: line 61 – col. 4: line 5].

Regarding claim 18, Merriam discloses the computing device is a mobile computing device [col. 3: lines 5-8].

Regarding claim 19, Merriam discloses the computing device is a desktop computing device [col. 4: lines 10-31].

Regarding claim 29, Merriam discloses the computing device is a hand-held mobile computing device [col. 3: lines 5-8; col. 4: lines 10-16].

5. Claims 17, 21-28, 30, 34-41, and 43, 44, 46-52, 54-59 are rejected under 35 U.S.C. 102(e) as being anticipated by Fitch et al., US Patent Number 6,321,092 (hereinafter Fitch).

Regarding claims 17, 34, 41, 43, 51, 52, and 59 Fitch discloses a method, apparatus, and computer readable medium for providing determining the location of a computing device comprising: providing multiple location providers that are configured to provide location information that pertains to a current location of the computing device; receiving location information from the multiple location providers using a common interface; and using the information that is received from the multiple location providers to ascertain a current device location [col. 6: lines 19-26].

Further regarding claim 43, Fitch discloses assigning a confidence parameter to location information for providing a measure of a provider's confidence in its location

information; and sending the location information and the confidence parameter to a location service module to use the location information and the confidence parameter to ascertain a current device location [col. 11: lines 11-17].

Further regarding claim 52, Fitch discloses assigning an accuracy parameter to location information for providing a measure of the accuracy of a provider's location information; and sending the location information and the accuracy parameter to a location service module to use the location information and the accuracy parameter to ascertain a current device location [col. 11: lines 11-17].

Regarding claims 21-23, and 44, Fitch discloses assigning confidence parameters to the information provided to the location service module, the confidence parameters providing a measure of a provider's confidence in the information; and assigning accuracy parameters to the information provided to the location service module, the accuracy parameters providing a measure of the accuracy of a provider's information [col. 11: lines 11-17].

Regarding claims 24-27, 36-39, 47-50, and 55-58, Fitch discloses updating information provided to the location service module continuously, periodically, at specified times, and on the occurrence of specified events [col. 11: lines 19-23; col. 12: lines 1-5].

Regarding claims 28, 40, 46, and 54, Fitch discloses receiving a request from the location service module and updating the information that is provided to the location service module based on the request [col. 4: lines 18-20; col. 12: lines 1-5].

Regarding claim 35, Fitch discloses the common interface accommodates multiple location providers that are different [col. 6: lines 35-38].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 20, 31, 45, and 53, are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch.

Regarding claims 20, 45, and 53, it is well known in the art for location providers to self-monitor their operation and to inform a location service module of an operation irregularity. It would have been obvious to one of ordinary skill in the art at the time of the invention to include this feature to ensure that the location service module does not use bad information from a malfunctioning provider.

Regarding claim 31, it is well known to continue operation when one or more of the location providers stops functioning. It would have been obvious to one of ordinary skill in the art at the time of the invention to include this feature as there are multiple location providers and other providers can be used when one or more are malfunctioning.

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8. Claims 32, 33, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fitch in view of applicant's submission of prior art, Wang, US Patent Number 5,539,922 (hereinafter Wang).

Regarding claims 32 and 42, Wang discloses a hierarchical tree structure comprising multiple nodes that are each assigned a unique identification, the nodes representing geographical divisions of the Earth, the location service module being configured to traverse at least some of the nodes to provide the current device location [abstract; col. 10; lines 42-49; col. 12: lines 18-41].

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Fitch to include Wang. The motivation for this combination as suggested by Wang, would have been to more efficiently and precisely determine the current location of a device in a point of space on the earth [abstract; col. 6: lines 13-17].

Regarding claim 33, Wang discloses providing a unique identification for one of the nodes of the hierarchical tree structure [col. 10: lines 42-49].

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Obradovich et al., US Patent Number 6,148,261, disclose a location tagged data provision and display system.

Dupray, US Patent Number 6,249,252, discloses wireless location using multiple location estimators.

Decker, US Patent Number 6,462,706, discloses finding the position of a communications device.

Obradovich, US Patent Number 6,525,768, discloses a location tagged data provision and display system.

Kepler, US Patent Number 6,748,225, discloses determination of location by signage and landmarks.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erika A. Gary whose telephone number is 703-308-0123. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EAG
November 16, 2004


ERIKA A. GARY
PRIMARY EXAMINER